

NOTES AND NEWS

TERMS USED TO DESIGNATE TYPE MATERIAL. Although the principal terms used to designate type material are sufficiently defined in the International Code of Botanical Nomenclature as adopted in 1950 (Regnum Vegetabile v. 3, 1952, pp. 17-18), there is still laxness among botanists in the application of these terms. For those who do not have access to that volume, the definitions there given may be repeated here with some legitimate modifications in wording, and a few collateral ones added.

A *holotype* (generally called "type") is the single specimen on which the description of a new taxon is based; the term is also somewhat loosely applied to the basic unit of preparation (sheet or packet of macroscopic specimens, slide of microscopic) on which a taxon is based. In the strict sense such units, if consisting of more than one specimen, are composed of syntypes.

A *syntype* (originally *cotype*, a term still used by some authors) is each of two or more specimens on which a taxon is based by an author who does not designate a holotype.

A *lectotype* is a single type selected by a subsequent author from among syntypes. By definition it has to be part of the original material.

A *paratype* is each specimen other than the holotype (or syntypes) cited in the original description by an author who designated a holotype (or syntypes).

An *isotype* is a duplicate of the holotype (duplicate in the sense that it is a part of the collection [e.g., Pringle 8248] on which a taxon was based). Even the most careful collectors occasionally distribute more than one entity under a given number, and an isotype should always be carefully compared with the original description before basing conclusions on it.

A *neotype* is a substitute type selected by a later author in a case where he has convincing proof that no holotype, syntype, paratype, or isotype is in existence. Any material can be selected as a neotype, but it is best to select a topotype, if practicable.

A *topotype* is a specimen (other than the type itself) from the type locality. It is not actually a type in any proper sense, but, especially in zoology, it may have the study value of a duplicate type.

The terms *isosyntype*, *isolectotype*, *isoparatype*, and *isoneotype* are available to designate duplicative material of the specimens that served for syntype, lectotype, paratype, and neotype respectively.

The most nearly complete glossary of terms relating to type material is given by D. L. Frizzell in *American Midland Naturalist* 14:637-668. 1933, and there is a discussion of some of the commoner terms of most use in botany by the writer in *Rhodora* 45:481-485. 1943.

With the above definitions in mind it can be seen that in the two papers on Cucurbitaceae by K. M. Stocking published in numbers 3 and 4 of this volume of *Madroño*, the term lectotype is used in the following places to designate specimens that are actually neotypes: on p. 96 (*Echinopepon minimus*), p. 126 (*Marah watsonii*), p. 130 (*M. fabaceus* var. *agrestis*), p. 132 (*M. macrocarpus*). On p. 86 the so-called lectotype of *Echinocystis lobata* should have been designated instead as a neotype but has no validity as such since Michaux's type is still in existence. The so-called "types" of *Echinopepon confusum* (p. 90), *E. nelsonii* (p. 92), *Marah major* (p. 134), and apparently also *Echinocystis scabrada* (p. 130) are lectotypes.—S. F. BLAKE, Agricultural Research Service, U. S. Department of Agriculture, Beltsville, Maryland.

Some publications of interest follow:

Drawings of British Plants, by Stella Ross-Craig. Part VII. Leguminosae. 76 pls. 1954. 12s. net. Part VIII. Rosaceae(1). 40 pls. 1955. 8s. 2d. net. G. Bell and Sons, Ltd., London.

Plant Genera, Their Nature and Definition, a symposium by G. H. M. Lawrence, I. W. Bailey, A. J. Eames, R. C. Rollins, M. S. Cave, and H. L. Mason, with an introductory essay on *Generic Synopses and Modern Taxonomy* by Theodor Just. *Chronica Botanica*, Vol. 14, No. 3, 1954. \$2.00. The Chronica Botanica Co., Waltham, Mass., and J. W. Stacey, Inc., San Francisco

The Ferns and Fern Allies of Minnesota, by Rolla M. Tyron, Jr. i-xx, 1-166, 207 figs, 85 maps, 2 pls. 1954. \$4.00. University of Minnesota Press, Minneapolis.

The Ferns and Fern Allies of New Mexico, by H. J. Dittmer, E. F. Castetter, and O. M. Clark. University of New Mexico Publications in Biology No. 6:1-139. 55 figs. 1954. This and the preceding will prove useful to both layman and botanist.

CALIFORNIA BOTANICAL SOCIETY
PUBLISHERS OF MADROÑO

REPORT OF THE TREASURER FOR 1955

RECEIPTS:

Balance on hand in commercial account, January 6, 1955.....	\$	720.50
From memberships and subscriptions		1,817.00
From sales of back numbers of <i>Madroño</i>		634.50
Receipts from annual dinner		129.50
Received as authors' share of publication costs.....		349.15
Total receipts		\$3,650.65

DISBURSEMENTS:

Credited to endowment fund from sales of back numbers.....	\$	634.50
Treasurer's expenses		75.98
Corresponding Secretary's expenses		76.62
Editorial Secretary's expenses		10.00
Cost of annual dinner		124.80
Cost of printing, binding, and mailing <i>Madroño</i> , Volume 13, Numbers 1, 2, 3, and 4.....		2,264.60
Total disbursements		\$3,186.50

BALANCE ON HAND IN COMMERCIAL ACCOUNT, American Trust Co., Palo Alto	\$	464.15
---	----	--------

ENDOWMENT FUND:

Palo Alto Mutual Savings and Loan Association, balance on hand January 5, 1956	\$	3,066.52
Accrued interest		97.70
Realized from two United States War Savings Bonds, Series F, matured January 1, 1955.....		200.00
From sales of back numbers of <i>Madroño</i>		634.50
Total		\$3,998.72

American Trust Company, savings account, balance Janu- ary 5, 1956	\$	365.25
Accrued interest		7.33
Total		372.58

Total endowment	\$	4,371.30
-----------------------	----	----------

Accounts audited and found correct:

WM. M. HIESEY, Auditor
January 23, 1956

RICHARD W. HOLM,
Treasurer for 1955